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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,686	01/23/2004	Motoharu Tanizawa	5000-5141	9107

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EXAMINER

IP, SIKYIN

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/763,686		TANIZAWA ET AL.	
	Examiner		Art Unit	
	Sikyin Ip		1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>08/05/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 8 is objected because it fails further limit the subject matter of a previous claim. The transitional expression "consisting of" in claim 1 cast product has excluded any unrecited element. Therefore, the expression "free from a rare-earth element" in claim 8 is superfluous.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 7, and 8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 09-271919 (PTO-1449, Table 1, inventive examples 1, 3, 4, 7, 12, and comparative examples 1 and 3).

Solidus temperature as recite in instant claim 4 is material property; therefore, it would have been inherently possessed by material of cited reference. The casting steps in instant claim 7 read on injection and semimelting castings. Moreover, the

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invention defined in a product-by-process claim is a product, not a process. In re Bridgeford, 357 F. 2d 679, 149 USPQ 55 (CCPA 1966) and MPEP § 2113. It is the patentability of the product claimed and not of the recited process steps which must be established. See In re Brown, 459 F. 2d 531, 173 USPQ 685 (CCPA 1972). The guidance that has been provided by court on this matter is

[i]f the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.

See In re Thorpe, 777 F.2d 695, 227 USPQ 964, 966 (Fed. Cir. 1985). When applicant's and prior art's products are to be identical or substantially identical, the burden shifts to applicant to provide evidence that the prior art product does not inherently possess the claimed properties. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977); In re Fessmann, 489 F.2d 742, 745 180 USPQ 324, 326 (CCPA 1974); and In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980).

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 4, and 6-9 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 4997622 to Regazzoni et al (col. 1, lines 5-35 and col. 8, lines 45-66) or USP 5073207 to Faure et al (PTO-1449, col. 1, line 40 to col. 2, line 5 and Col. 4, Table 1, Test No. 1).

Claim 3 is rejected under 35 U.S.C. § 103 as being unpatentable over JP 09-271919 (abstract and examples 1,3, and 4).

Cited references disclose(s) the features including the claimed Mg based alloy compositions. Therefore, when prior art compounds essentially "bracketing" the claimed compounds in structural similarity are all known, one of ordinary skill in the art would clearly be motivated to make those claimed compounds in searching for new products in the expectation that compounds similar in structure will have similar properties. In re Gyurik, 596 F.2d 1012, 1018, 201 USPQ 552, 557 (CCPA 1979); See In re May, 574 F.2d 1082, 1094, 197 USPQ 601, 611 (CCPA 1978) and In re Hoch, 57 CCPA 1292, 1296, 428 F.2d 1341, 1344, 166 USPQ 406, 409 (1970). Therefore, it would have been obvious to one of ordinary skill in the art to select any portion of range, including the claimed range, from the broader range disclosed in a prior art reference

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because the prior art reference finds that the prior art composition in the entire disclosed range has a suitable utility. Also see MPEP § 2131.03 and § 2123. With respect to the instant claim 3 that the ratio is overlapped by the cited references because the claimed proportions of Al and Ca have been disclosed.

With respect to the Ca to Al ratio that the claimed proportions of Ca and Al are overlapped by said elements of cited references. Therefore, the ratio would have been overlapped. Furthermore, it is well settled that there is no invention in the discovery of a general formula if it covers a composition described in the prior art, *In re Cooper and Foley* 1943 C.D. 357, 553 O.G. 177; 57 USPQ 117, *Taklatwalla v. Marburg*, 620 O.G. 685, 1949 C.D. 77, and *In re Pilling*, 403 O.G. 513, 44 F(2) 878, 1931 C.D. 75. In the absence of evidence to the contrary, the selection of the proportions of elements would appear to require no more than routine investigation by those ordinary skilled in the art. *In re Austin, et al.*, 149 USPQ 685, 688.

With respect to the properties as recited in instant claim 4 which are material properties. Thus, it would have been inherently possessed by the material of cited references. The product by process steps in instant claim 7 are no more than essential steps the required to form an alloy. Moreover, the invention defined in a product-by-process claim is a product, not a process. *In re Bridgeford*, 357 F. 2d 679, 149 USPQ 55 (CCPA 1966) and MPEP § 2113.

Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 09-271919 as applied to claims above, and further in view of USP 4997622 to Regazzoni et al.

JP 09-271919 discloses the features substantially as claimed as set forth in the rejection above except for the grain size. However, Regazzoni in col. 8, lines 45-66 teaches fine grain would improve mechanical properties in the same field of endeavor or the analogous metallurgical art. Therefore, it would have been obvious to one having ordinary skill in the art of the cited references at the time the invention was made to produce fine grain Mg based alloy as taught by Regazzoni in order to improve/provide mechanical properties. In re Aller, et al., 105 USPQ 233.

Response to Arguments

Applicant's arguments filed November 21, 2005 have been fully considered but they are not persuasive.

EP '710 has been withdrawn because of instant amendment to claim 1.

Applicants' argument with respect to Regazzoni in page 6 of instant remarks is noted. But, first, none of rejected claims recites any measurable properties such as castability and heat-resistance. Second, Zn is mere an optional element disclosed by Regazzoni.

Applicants' argument with respect to Faure in page 6 of instant remarks is noted. But, if Zn and REM are essential elements, then their lower limits would be greater than zero.

Applicants' argument in instant remarks with respect to examples of cited U.S. references is noted. But, it is well settled that the examples of the cited reference are given by way of illustration and not by way of limitation. In re Widmer, 353 F.2d 752, 757, 147 USPQ 518, 523 (CCPA 1965), In re Boe, 148 USPQ 507 (CCPA 1966), and In

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re Snow, 176 USPQ 328. The teaching of a reference is not limited to preferred embodiments. All disclosures of prior art, including unpreferred embodiments, must be considered in determining obviousness. See *In re Boe*, 148 USPQ 507, 510 (CCPA 1966), *Ex parte Thumm* 132 USPQ 66, 68, and *In re Siebentbritt*, 152 USPQ 618.

Moreover, under 35 USC § 103, a reference must be considered not only for what it expressly teaches, but also for what it fairly suggests. *In re Lamberti*, 545 F.2d 747, 192 USPQ 278, 280 (CCPA 1976); *In re Simon*, 59 CCPA 1140, 461 F.2d 1387, 174 USPQ 114 (1972); and *In re Mills*, 470 F.2d 649, 176 USPQ 196 (CCPA 1972).

Ultradent Prods., Inc. v. Life-Like Cosmetics, Inc., 127 F.3d 1065, 1068, 44 USPQ2d 1336, 1339 (Fed. Cir. 1997) (error to construe prior art disclosure as limited to the preferred embodiment). MPEP §2123.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See 37 C.F.R. § 1.121.


Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (571) 272-1241. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (571)-272-1244.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SIKYIN IP
PRIMARY EXAMINER
ART UNIT 1742

S. Ip
February 20, 2006